

1. A method of

selecting N encoded binary digital signals, N being a value comprising substantially the same number of bits as the number of bits comprising an extreme length code word in said data structure.

2. The method of claim 1, and further comprising, after the previous comparision:

comparing said M encoded binary digital signals with two or more entries from said data structure at substantially the same time.

repeating said selecting M encoded binary digital signals and said comparing M encoded binary digital signals until said encoded binary digital signals are substantially decoded.

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1 5. The method of claim 1, wherein the data structure is organized, at least in part,
2 based on code length.

1 6. The method of claim 1, wherein the data structure is organized in sub groupings of
2 code words having the same code length, the sub groupings being arranged sequentially.

1 7. The method of claim 1, wherein said extreme length code word comprises the
2 shortest code word in said data structure.

1 8. The method of claim 1, wherein said extreme length code word comprises the
longest code word in said data structure.

9. A method of decoding a series of encoded binary digital signals using a data
structure, said data structure having multiple base indices and multiple base codes, said
method comprising:

selecting a set of N encoded binary digital signals, N being a value at least as great
in length as an associated base code, wherein a set of N encoded binary digital signals is
6 selected for substantially each base code in an associated data structure; and

7 comparing one or more said sets of N encoded binary digital signals with the
8 associated base codes at substantially the same time.

1 10. The method of claim 9, and further comprising, after the previous comparison:

2 selecting a set of M encoded binary digital signals for subsequent comparisons, M
3 being a value at least as great in length as an associated base code, wherein a set of M

4 encoded binary digital signals is selected for substantially each base code in an associated
5 data structure; and

6 comparing one or more said sets of M encoded binary digital signals with the
7 associated base codes at substantially the same time.

1 11. The method of claim 10, and further comprising:

2 repeating said selecting M encoded binary digital signals and said comparing M
3 encoded binary digital signals until said encoded binary digital signals are substantially
4 decoded.

12. The method of claim 9, wherein the binary digital signals are encoded in accordance
with a Huffman code.

13. The method of claim 9, wherein the data structure is organized, at least in part,
based on code length.

14. The method of claim 9, wherein the data structure is organized in sub groupings of
2 code words having the same code length, the sub groupings being arranged sequentially.

1 15. An apparatus for decoding a series of encoded binary digital signals comprising:
2 at least one base code register and at least one base index register, wherein said
3 registers are configured to read values from an associated data structure by applying the
4 contents of said registers to an input signal, to produce an index.

17. The apparatus of claim 16, wherein said at least one subtractor, said at least one adder, and said at least one daisy chain circuit are embodied on a single integrated circuit.

1 19. A data structure of code words, the code words being arranged in sub groupings,
2 comprising at least one of the following:
3 code word length;
4 base code;
5 reference code; and
6 base index.

1 32. The method of claim 31, and further comprising:
2 determining a base index for at least one subgrouping of code words, wherein the
3 base index comprises the lexicographically consecutive position of the first code word of a
4 given subgrouping within the entire set of code words.

determining a base code for at least one sub grouping of code words, wherein the base code comprises the lexicographically first code word in a given sub grouping within the entire set of code words.

34. An article comprising:

a storage medium having stored thereon instructions, that when executed by a computing platform, result in a method of decoding a series of binary digital signals using a data structure, wherein said data structure has multiple base indices, being executed, said method comprising:

selecting N encoded binary digital signals, N being a value comprising substantially the same number of bits as the number of bits comprising an extreme code word in said data structure.

comparing said N encoded binary digital signals with two or more entries from said data structure at substantially the same time.

35. The article of claim 34, having stored thereon instructions that when executed further result in :

after the previous comparison:

selecting M encoded binary digital signals for subsequent comparisons, M being a value comprising substantially the same number of bits as the number of bits comprising an extreme code word in said data structure, minus the number of bits that were not decoded in the previous comparison; and

comparing said M encoded binary digital signals with two or more entries from said data structure at substantially the same time.

5 an extreme code word in said data structure, minus the number of bits that were not
6 decoded in the previous comparison; and
7 comparing said M encoded binary digital signals with two or more entries from said
8 data structure at substantially the same time.

1 40. The system of claim 38, wherein said method further comprises:
2 repeating said selecting M encoded binary digital signals and said comparing M
3 encoded binary digital signals until said encoded binary digital signals are substantially
4 decoded.

41. The system of claim 38, wherein the method of decoding, when executed, is capable of decoding the binary digital signals that have been encoded in accordance with a Huffman code.